

1.(Previously presented) An apparatus for inducing sputum from a patient, the apparatus comprising:

a chest compression vest for applying force to a chest region of the patient; a pressure generator connected to the vest for providing an oscillating pressure;

and

a mouthpiece having a first portion configured to extend sufficiently into the patient's mouth to depress the patient's tongue to minimize airflow resistance, the first portion of the mouthpiece placed in the patient's mouth being configured to be spaced apart from the patient's trachea,

wherein the pressure generator provides the oscillating pressure at at least one frequency between about 5 pressure cycles per second and about 25 pressure cycles per second.

20.(Previously presented) An apparatus for inducing sputum from a patient, the apparatus comprising:

a chest compression vest for applying force to a chest region of the patient;

a pressure generator connected to the vest for providing an oscillating pressure;

a mouthpiece for placement in a mouth of the patient to minimize airflow resistance, the mouthpiece including a port adapted for connection to a source of ~~an a cough inducing~~ aerosolized solution, the cough inducing aerosolized solution being fed to the mouthpiece along a path not passing through the vest; and

wherein the force applied by the chest compression vest induces sputum from the patient.

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